



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,447	12/13/2000	Guy Richard Chandler	JMYT-223US	4878
7590	06/01/2004		EXAMINER	
PAUL PRESTIA ONE WESTLAKES BERWYN SUITE 301 VALLEY FORGE, PA 19482			TRAN, DIEM T	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/623,447

Applicant(s)

CHANDLER ET AL.

Examiner

Diem Tran

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1,4,5,7-9 and 11-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1,4,5,7-9 and 11-20 is/are allowed.
- 6) ☐ Claim(s) 21-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

This office action is in response to the Applicant's response filed on 3/8/04. The arguments contained therein were deemed persuasive, however, a new non-final rejection is set forth below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21, 22, 27, 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Murachi (US Patent 5,746,989).

Regarding claims 21, 22, 27, 28, Murachi discloses an emission control exhaust gas aftertreatment apparatus for exhaust gases from diesel engines, comprising a source of NO₂ (5), a particulate filter (7) of sufficient capacity to accumulate particulate under all normal operating conditions (see Figure 1, col. 4, lines 29-42), wherein the filter is effective to trap up to 85 wt % of engine out particulates for combustion in the presence of said NO₂ in said filter (see col. 5, lines 43+).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murachi et al. (US patent 5,746,989) as applied to claim 21 above, in view of Buck (US Patent 5,571,298).

Regarding claims 23, 24, Murachi discloses all the claimed limitations as discussed in claim 21 above, however, fails to disclose that the filter comprises woven wire mesh or knitted wire mesh. Buck teaches that it is conventional in the art, to utilize a filter comprising woven wire mesh or knitted wire mesh (see col. 1, lines 30-40).

It would have been obvious to one having ordinary skill in the art, to have utilized a filter comprising woven wire mesh or knitted wire mesh as taught by Buck in the Murachi apparatus, since the use thereof would have improved the efficiency for the particulate filter.

Claims 25, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murachi et al. (US patent 5,746,989) in view of Sato et al. (US patent 4,535,588).

Regarding claims 25, 26, Murachi discloses a method of controlling emissions from diesel engine exhaust gases by trapping and subsequently combusting said particulate matter, comprising trapping up to 85% of particulates matter in said exhaust in a particulate filter and combusting said trapped particulate matter in the presence of NO₂; however, fails to disclose causing a portion of said exhaust gases to by-pass said particulate filter under all operating conditions. Sato teaches that it is conventional in the art, to cause a portion of said exhaust gases to by-pass said particulate filter under all operating conditions (see Figure 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teaching of Sato in the Murachi method since the use thereof would have alleviated the increasing back pressure when the particulate trap becomes substantially blocked.

Allowable Subject Matter

Claims 1, 4, 5, 7-9, 11-20 are allowed.

Response to Arguments

Applicant's arguments filed 3/8/04 have been fully considered but they are moot in view of a new non-final rejection as set forth above.

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (703) 308-6073. The examiner can normally be reached on Monday -Friday from 8:00 a.m.-5:30p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (703) 308-2623. The fax number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

DT

May 24, 2004



Diem Tran
Patent Examiner
Art unit 3748



THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700